

Serial No. 09/918,733

Amend. dated 30 December 2008

Reply to Office Action of 28 October 2008

***Amendments to the Drawings:***

The attached drawing sheet includes a formal version of FIG. 3 and replaces the original sheet including FIG. 3. No new matter has been added.

Attachment: Replacement sheet for FIG. 3

## ***REMARKS***

As noted previously, the Applicant appreciates the Examiner's thorough examination of the subject application.

Claims 1, 5-13, 26, 28, 29 and 33 remain in the application. In the Office Action mailed 28 October 2008, claims 1, 5-13, 26, 28, 29, and 33, were rejected on statutory grounds, as described in further detail below. Claims 1, 26, and 29 are amended herein. FIG. 3 is amended herein. No new matter has been added.

Applicant respectfully requests reconsideration and further examination of the application based on the foregoing amendments and the following remarks.

### ***Drawings***

Concerning item 2 of the Office Action, the drawings were object to because FIG. 3 was said to contain informal handwritten labels. The present amendment includes a replacement sheet for FIG. 3 that is in compliance with 37 CFR § 1.121(d). Thus, the objection to the drawings is believed to be overcome.

### ***Claim Rejections – 35 U.S.C. § 103***

Concerning items 3-4 of the Office Action, claims 1, 5-13, 26, 28, 29, and 33 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,725,194 to Bartosik et al. (“Bartosik”) in view of U.S. Patent No. 6,246,981 to Papineni et al. (“Papineni”). Applicant respectfully traverses this rejection and requests reconsideration for the following reasons.

As a threshold matter, it is noted that independent claims 1, 26, and 29 have been amended herein to clarify that the human operator and the telephone respondent are separate individuals.

For a rejection under 35 U.S.C. § 103(a), the cited reference(s) must teach or suggest each and every limitation of the claim(s) at issue and proper motivation must exist to combine or modify the teachings of the references in the way proposed for the rejection. Stated another way, a conclusion of

obviousness requires that the reference(s) relied upon be enabling in that it/they put the public in possession of the claimed invention and proper motivation must exist to combine or modify the teachings of the references in the way proposed by the Examiner.

In this situation, these requirements are not met: the cited combination of Bartosik and Papineni fails to teach or suggest all of the limitations of amended independent claims 1, 26, and 29; and, proper motivation does not exist to combine the references in the way the Examiner has proposed. Therefore, the rejection is improper, as is explained in detail below.

***i. All claim elements are not taught/suggested***

Amended claim 1, representative of the independent claims of the application, recites:

A speech recognition system comprising:

a querying device for posing at least one query over a telephone to a telephone respondent;

a speech recognition device that is configured and arranged to receive an audio response from said respondent over the telephone and to conduct a speech recognition analysis of said audio response to automatically produce a corresponding text response;

a storage device for recording and storing said audio response as it is received by said speech recognition device;

an accuracy determination device for automatically comparing said text response to a text set of expected responses and determining whether said text response corresponds to one of said expected responses, wherein said accuracy determination device is configured and arranged to determine whether said text response corresponds to one of said expected responses within a predetermined accuracy confidence parameter and to automatically flag said audio response so as to produce a flagged audio response for further review by a human operator, wherein the human operator is different from the telephone respondent, when said text response does not correspond to one of said expected responses within said predetermined accuracy confidence parameter; and

a human interface device for enabling said human operator to hear said flagged audio response

and review the corresponding text response for the flagged audio response to determine the actual text response for the flagged audio response, either by selecting from a pre-determined list of text responses or typing the actual text response if no such match exists in the pre-determined list of text responses.

[Emphasis added]

For the rejection, the Examiner alleges that Bartosik teaches, *inter alia*, “an accuracy determination device . . . and to flag said audio response so as to produce a flagged audio response for further review by a human operator,” citing Bartosik at col. 6, lines 7-16 and col. 9, lines 1-62. Applicant respectfully traverses such a characterization of Bartosik.

Applicant notes that claim 1 has been amended to recite, among other things, “wherein said accuracy determination device is configured and arranged to . . . automatically flag said audio response so as to produce a flagged audio response for further review by a human operator, wherein the human operator is different from the telephone respondent.”

Bartosik does not teach the above-quoted portion of amended claim 1 but rather is seen as actually teaching systems and methods that functions similar to a dictation machine. See, e.g., Bartosik, col. 3, lines 8-11 (“FIG. 1 shows a computer 1 by which a speech recognition program according to a speech recognition method is run, which computer 1 forms a dictating machine with a secondary speech recognition device.”). Bartosik relies upon a user reading all recognized text information to determine erroneous recognitions, and because of such actually teaches away from the Applicant’s claims.

Moreover, Applicant contends that attributing a flag, as Applicant’s claimed systems and methods do, to a portion of speech not matching a response from a set of anticipated responses does not read on or correlate to attributing a sliding scale factor to such portion of speech as taught by Bartosik. As noted above, Applicant’s independent claims, e.g., claim 1, have been amended to clarify that “the human operator is different from the telephone respondent.”

The Examiner correctly admits that Bartosik does not explicitly teach a querying device for posing at

least one query to a respondent and that the communication device utilized is a telephone. In an attempt to cure these admitted deficiencies, the Examiner cites Papineni as a secondary reference under 35 U.S.C. § 103(a). Papineni, however, further contrasts with Applicant's amended claims by being directed to a speech recognition and synthesis system including a natural language task-oriented dialog manager.

Papineni teaches only a general text-to-speech synthesizer. For example, Papineni merely teaches that "hub 10 passes speech data to the speech recognizer 20 which in turns passes the recognized text back to the hub." *See* Papineni, col. 7, lines 66-67. Papineni even goes as far as stating its invention focuses on the dialog manager and script and not the described speech recognizer or text-to-speech synthesizer. *See* Papineni, col. 8, lines 12-18. Papineni clearly does not teach or suggest, e.g., "flagging an audio response in the event a predetermined confidence parameter is not met" and also does not teach "the human operator is different from the telephone respondent" as recited in Applicant's claims.

Thus neither Bartosik nor Papineni teach or suggest all of the limitations of claims 1, 5-13, 26, 28, 29, and 33 of the subject application.

### ***ii. Proper motivation is not present***

Not only do Bartosik and Papineni fail teach or suggest all of the limitations of Applicant's claims, but proper motivation does not exist to combine and/modify the teachings of the references in the way the Examiner has proposed.

While acknowledging deficiencies of Bartosik, the Examiner provided the following as ostensible motivation for the obviousness rejection: "Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use Papineni's teaching in the invention of Bartosik because Papineni teaches his invention provides a more versatile interface for interfacing with users (col. 1, lines 9, 10)."

Such logic, however, is seen as being incorrect as Papenini itself does not teach operation with a

stand alone dictation machine. Bartosik is of no further avail as it explains a key difference between its invention and Applicant's claimed invention: namely, that the systems and methods of Bartosik derive a numerical value (the correspondence indicator CI) that is used for the adjustment of a speech coefficient indicator SKI during operation in a training mode – this correspondence indicator (CI) is not used to flag an audio response in the way claimed by Applicant:

Furthermore, the text comparing means 52, when comparing the recognized text information RTI and the corrected text information CTI, are provided for determining a correspondence indicator CI for each text part. The text comparing means 52 then determine how many matching words featured by a grey field a text part contains. Furthermore, the text comparing means 52 determine penalty points for each text part, with one penalty point being awarded for each insertion, deletion or substitution of a word in the corrected text information CTI. The correspondence indicator CI of the text part is determined from the number of the corresponding words and penalty points of a text part.

In the text comparing means 52 is determined a minimum value MW for the correspondence indicator CI, which minimum value is fallen short of when for a text part more than three penalty points are awarded for corrections of adjacent words of the corrected text information CTI. For the adjustment of the speech coefficient indicator SKI, only text parts are used whose correspondence indicator CI exceeds the minimum value MW.

(Bartosik, col. 9, lines 43-62) [Emphasis added]

Bartosik further explains that the adjustment of the SKI occurs in a training mode – not a normal use mode:

When the initial training mode is activated, the text processing means 47 are arranged for reading out the training text information TTI from the training-text memory means 47 and for feeding respective picture information PI to the monitor 4. A user can then utter the training text displayed on the monitor 4 into the microphone 6 to adjust the speech recognition device to the user's type of pronunciation [sic].

The speech recognition device has adjusting means 50 for adjusting the speech coefficient indicator SKI stored in the speech-coefficient memory means 38 to the type of pronunciation [sic] of the user and also to words and word sequences commonly used by the user. The text memory means 43, the correction means 49 and the adjusting means 50 together form the training

means 51. Such an adjustment of the speech coefficient indicator SKI takes place when the initial training mode is activated in which the training text information TTI read by the user is known.

Such an adjustment, however, also takes place in an adjustment mode in which text information corresponding to voice information is recognized as recognized text information RTI and is corrected by the user into corrected text information CTI. For this purpose, the training means 51 include text comparing means 52, which are arranged for comparing the recognized text information RTI with the corrected text information CTI and for determining at least a correspondence indicator CI. In the text comparing means 52 an adjustment table 53 shown in FIG. 4 is established when the adjustment mode is on, which table will be further explained hereinafter.

(Bartosik, col. 6, line 47 through col. 7, line 9.) [Emphasis added]

Because of such, Applicant respectfully submits that Bartosik and Papenini provide no motivation for their combination and actually teach away from Applicant's claims.

Applicant reasserts that proper motivation is not present when one or more of the references teach away from the structure/modification suggested by the Examiner, as is the present case concerning Bartosik and Papineni. MPEP § 2145 (X)(D)(2) explains "It is improper to combine references where the references teach away from their combination," citing *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Circ. 1983), which case was decided after and is consonant with *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

For at least the foregoing reasons, the cited combination of Bartosik and Papineni (regardless of whether the references are considered together or separately) is an improper basis for a rejection of claims 1, 5-13, 26, 28, 29, and 33 under 35 U.S.C. § 103(a); Applicant requests that the rejection of these claims be removed accordingly.

### ***Conclusion***

In view of the remarks and amendments submitted herein, Applicant respectfully submits that all of the claims now pending in the subject application are in condition for allowance, and therefore requests a Notice of Allowance for the application.

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Authorization is hereby given to charge any required fees and to credit any overpayments to deposit account No. 50-1133.

If the Examiner believes there are any outstanding issues to be resolved with respect to the above-identified application, the Examiner is invited to telephone the undersigned at his earliest convenience so that such issues may be resolved.

Respectfully submitted,

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Date: 30 December 2008

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